5: Schwimmer E-4,5 (1966-1967) 1973
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so formidable and irresistible as to leave open no other option. For many Orokaiva, this became a certainty only as a result of what to us would seem an entirely unconnected event, namely the Mount Lamington eruption of 1951. The effect of this eruption on Orokaiva ideology is worth a brief analysis here because it provides evidence that the 'new day' ideology is still essentially based on the traditional exchange-oriented Orokaiva philosophy. We find that the cataclysm was universally ascribed by the Orokaiva to the breakdown in an exchange relationship with some *dema*, and that many believed this *dema* to have been the Christian God. On the basis of this theory, the Orokaiva were led to search for more effective mediating links between themselves and these powers, so as to avoid similar misfortunes in the future. Development activity and baptism were the most important of the mediating elements in which they placed their faith.

As I have already published a full survey of Orokaiva explanations of the eruption (Schwimmer 1969), my summary here will be brief. In 1966, during visits to Inonda, Hohorita and Sivepe, I interviewed a number of survivors about the explanation of the disaster given by people *at the time it occurred*. All informants were agreed that at that time the increasing rumbling in the mountain, the tremors, the smoke issuing from the crater, the showers of ash, the emission of stones and fiery particles, and finally the Peléan eruption, were all ascribed to the anger[6] of Sumbiripa, the god of the mountain, though there were varying explanations of the probable cause of that anger. These statements tallied with published evidence from two clergymen, both present in the Northern District at the time of the eruption, who refer to the people's fear of the anger of Sumbiripa (Tomlin 1951, Benson 1955).

Evidence of a different kind comes from two anthropologists (Belshaw 1951, Keesing 1953) both of whom interviewed survivors a few weeks after the disaster. Belshaw summarises Orokaiva explanations as follows:

> Some people said that this was God's visitation because they had disobeyed the Bishop's instructions to build new churches. Others said that God had punished them because they had not helped the Allies sufficiently during the war and because some of them had betrayed missionaries to the Japanese. (Others again mentioned) lack of co-operation in Mission and Government plans for development. (1951: 242)

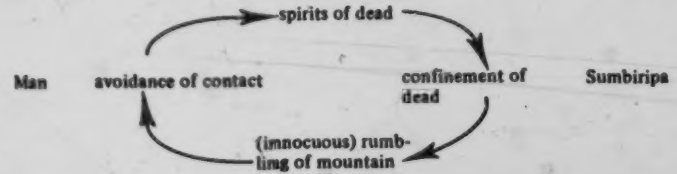
Keesing agrees with this summary, adding that the eruption resulted in 'strong feelings of insecurity and even of guilt in their retrospective look at the pre-eruption way of life'.

Many resident Europeans, including the Bishop of New Guinea, the Most Rev. David Hand, confirmed Belshaw's and Keesing's account, but the Bishop told me that the mission has since discouraged the Orokaiva from thinking that the Christian God harboured anger against them and expressed it with such indiscriminate violence.[7] Hence this explanation is no longer heard. People nowadays believe that the eruption was caused by the anger of Sumbiripa or, if they wish to display a modern scientific attitude, they will repeat what they have been told about vulcanology.

Explanations based on the anger of Sumbiripa, the government and the Christian God resemble each other in that they are all based on the concept of a

784 823 795 social exchange relationship in which the Orokaiva thought they had defaulted. In the case of Sumbiripa, this relationship was a rather special one as Sumbiripa's gift is the safe confinement of the dead, whereas man's gift is avoidance of any disturbance of Sumbiripa's mountain. Man mediates the relationship by sending his dead to Sumbiripa, whereas Sumbiripa mediates by emitting his usually innocuous rumbling. Before 1951, Sumbiripa had never erupted in living memory. We may express this in the following diagram:

MODEL 9



One theory of the eruption was that man had broken the exchange relationship by hunting on the mountain with guns. This disturbance angered Sumbiripa so that instead of innocuous rumbling he emitted the full blast of his immense and disastrous fury. The effect of breaking the exchange relationship with the Church was thought to be disastrous in precisely the same way. Just as the rumbling of the mountain suddenly became lethal instead of benevolent, so the 'communion' offered by the Church suddenly turned negative, dispensing retributive justice instead of mercy. Similarly, default in a social exchange relationship between human beings may lead the wronged person to give Alter misfortunes and diseases through sorcery, instead of the benefits he would otherwise bestow. If a relationship is broken, the wronged partner may respond by invoking negative mediating elements to obtain redress.

823 797 This dangerous trend may be reversed by expressing repentance, and by receiving forgiveness (see models 1 and 3). Subsequently, the offender will be more careful, if he is prudent, to stop the relationship from breaking down. Thus, after the eruption, the Orokaiva became more careful to carry out development activity (model 7) and seek baptism (model 8). The fact that the Anglican Mission denied that God had been angry would in no way diminish their solicitude, as such denials are always issued by offended exchange partners as part of the ritual of showing their forgiveness. Detailed empirical evidence given elsewhere (Schwimmer 1969) in fact shows that the eruption speeded up the development of the *iji eha* ideology among the Orokaiva. It would be wrong, however, to suppose that the supernatural fear propelling the Orokaiva towards development and baptism was due to a cruel deception by the mission or to irrational self-deception on the part of the people. It may equally well be regarded as a case of rational choice. It is not at all irrelevant to emphasise that development and baptism, in fact the whole *iji eha* ideology, was a sensible direction for the Orokaiva to take. The explanation of the disaster which they adopted was not a blind reaction to external vicissitude but rather the strategic reinforcement of a mythical charter for institutions mediating a valuable

A [See Category 829, pp. 58-9--Analyst]
B [See Category 657, p.75--Analyst]
C [See Category 797, p. 77--Analyst]

5: Schwimmer E-4,5 (1966-1967) 1973
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824 she takes them home. The brother is clearly identified with taro growing in the
773 field.)

244 7. The story tells in more detail than is relevant here how the sister learned
539 what had happened, how a magician from Managalasi brought the brother back to life by giving him the heart and intestines of a wallaby, how this man married the sister and how the young man killed his father when the latter returned to complete his meal. He cut his father into many pieces which were shared out among men whose descendants became the various population groups in the Northern District, as discussed in Chapter III.

The myth takes us through two complete cultivation cycles from the planting of the *bere*, the covering over with weeds to protect them from the sun, the gradual growth of the plants under the care of the woman, to the shifting of a new *bere* to a new garden, and finally the growing of these new *bere* to maturity. I was given no explanation as to why the myth contains two cultivation cycles rather than one, but it becomes clearer if we regard the myth, on the horticultural level, as symbolising the domestication of what was at one time a wild plant. At this level, the myth starts with the finding of wild taro and the transplanting of the *bere* of that taro to a garden clearing. When these *bere* grow to maturity, new *bere* are taken from them and these in turn are transplanted. The products of this second planting are regarded as properly domesticated taro.

One may well wonder why the second cultivation cycle was introduced into the myth at all. Direct inquiry did not produce wholly satisfactory answers.
[262] People no longer eat taro that grows in the bush, I was told, because it does not taste sweet, it is small, it hurts the mouth. Nobody transplants wild taro *bere* to cultivated gardens nowadays; this was done only in the times of the ancestors. Informants' attitudes to this question were often of this kind when we were
[775] discussing the jungle. It was above all a place where the ghosts (*sovai*) lived and therefore dangerous. Wild pigs, especially, often harbour ghosts. If plants or animals are domesticated, it is the dispelling of ghostly essences that is the objective of the practices followed. I shall show this in more detail when discussing the domestication of pigs. Taking into account this fear and suspicion of the bush, it is understandable that a seed taken from the bush is not regarded as domesticated just because it has grown to maturity in a garden. A plant grown from a bush seed is regarded as still being contaminated by *sovai* influence. It is only the second harvest that can be regarded as wholly belonging to the domesticated domain.

[775] We have already met the same idea when discussing the taboo on taro-growing on a dead man's land. This taro is effectively contaminated in the same way as
[784] bush taro. It is not eaten by those whom it endangers. The next crop planted is still dangerous, and it is only the second planting after the previous owner's death that is free from taboo.

This discussion has already developed one of the main themes of the myth, namely the opposition between bush and garden, the wild and the sown, the dwelling place of spirits and the cultivated domain from which they are carefully banished. If we now turn to the message transmitted by the myth at the social level, we find a similar opposition, namely that between Totoima and his wife. Totoima who kills his own children, using his tusks as he does so, has partly a pig

The sacrifice undoubtedly transforms the nature of the victim, as the meat, after the analogy of the body of Totoima, is divided among all the guests, who will 'greatly multiply' by the *ivo* the meat confers after this simple sacrament. 796 574

After the sacrifice the group who offered it becomes irrevocably separated from the victim. The composition of the group to whom consumption of the sacrificed pig is forbidden is as follows: the pig's 'mother' and 'father', their siblings, their parents, their parents' siblings, and their children. Infringement of the taboo is said to lead to the death of one of the sons of the pig's 'mother'. I was told that the taboo lapses once a woman's daughters have themselves given birth to children. We may safely deduce from this last limitation of the range of the taboo that it serves to protect the woman's power of child-bearing. The taboo does not reach to the third generation: it does not include the grandparents of the pig-rearers. Nor does it include parallel or cross-cousins. These rules emphasise the position of the pig as a member of the family group. The sacrificer of a pig is identified with Totoima precisely in that both killed their own children. 782 [825] [784] [842] [602]

The membership of host and guest groups is defined mainly by residence: one village invites another. It also occurs, in multi-clan villages, that the two groups comprise only some of the local clan groups of the host and guest village. I did not note cases of two-clan villages where this happened, but it does occur in four-clan villages such as Hohorita and Sasembata. Some close relatives of the hosts, though not resident in the host village, may decide to attend and may make a food contribution. The guest group that is invited usually matches the host group approximately in strength. If there is a wide disprepancy in numbers there is a tendency for several closely-linked villages to join together as hosts or to be invited together as guests. 574 614 621 [628]

Relationships between hosts and guests are cultivated on both the collective and the family level. The Orokaiva have no large houses for guests, so that each family of guests is accommodated with a family of hosts. If two villages have never feasted together partnerships are arranged at a preliminary meeting, always making allowance for previously existing relationships. Once partnerships are established they become a standing reciprocal arrangement, inherited by the children of the original partners. A good part of the planning of a feast consists of amassing suitable gifts to be made to one's visiting partner. It is he who must, above all, be impressed by his host and overwhelmed with generosity. On the collective level, guests are expected to dance for their hosts and to carry out rain-making and crop-promoting rituals. 574 628 437 [789]

When I asked why the help of guest sorcerers was necessary to ensure increase of the food supply, I was told that if taro grows poorly in a garden it is assumed that an enemy is using *puripuri* (a form of magic) against this garden, thus stopping the taro from flourishing. When a whole village has poor results, it is believed that someone has used medicine against *all* the gardens. According to his reasoning, the task of the friendly magicians at a feast is to remove their own previous black magic from the gardens. As shown in previous chapters, the assumption is always that parties meeting at a feast have been living in something like imperfect harmony. This implies that there may have been sorcery. [789] [244]

The harvest feast is, therefore, an occasion when the community acts as a corporate group to meet a magical danger which transcends the individual. A 574 621 [789]

5: Schwimmer E-4,5 (1966-1967) 1973
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crucial passages verbatim. In the full text, the brother comes back four or five times to the miracle that chiefly concerns him: the symbiosis of coconut and areca, dropping their fruits side by side and thus (as he implies rather than states) fertilising one another. Taking this symbiosis as a fact of nature, the hero uses it to explain several other mysterious facts: (*a*) why all the bachelors died; (*b*) the ritual uses of coconut and *areca*; (*c*) why the Orokaiva consider coconut masculine, *areca* feminine. To answer the first question, he refers to an easily verified fact: the *peneruma* of the coconut do look like a girl's breasts; they are very dangerous if one falls upon them with any force. His sister was clearly an *embavo*, a coconut spirit. In this way the deaths are, to Orokaiva thought, adequately accounted for.

The hero explains two types of ritual uses of coconut and *areca*, namely those related to mortuary feasts and those where the sex of the recipient of the nuts is opposite to that of the donor. The instruction that nobody should eat the nuts lying under the trees, on pain of death, constitutes a mythological charter for the taboo placed upon the cocopalms and *areca* palms owned by a person recently dead. An informant explained a further implication to me, which is not very clear from the version I quoted: namely that it is customary to place coconuts and *areca* nuts upon the grave of a dead affine. Thus it was the duty of the hero to place coconuts and *areca* nuts upon the grave of his brother-in-law; and the duty of his wife to do the same for the grave of her sister-in-law. In order to clarify these points, the myth tells of the wife's desire to eat the nuts and the hero's refusal to let her have them.

In a somewhat elliptical manner, the hero lists or implies three sets of rules concerning gifts of coconut and *areca*, where the sex of the recipient of the nuts is opposite to that of the donor. The sets are:

Areca	*Coconut*
1(*a*) The man fetches the nuts from the tree.	1(*b*) The woman *helps to fetch* the nuts from the tree.
2(*a*) The man gives the nuts to the woman.	2(*b*) The woman cooks the nuts for the man.
3(*a*) The girl offers nuts to her lover and carries an offering of nuts at initiation.	3(*b*) At a girl's initiation, a man prepares coconut oil which is used as a ritual cosmetic.

The first opposition is made quite explicit in the hero's speech, but is not free from casuistry. Men usually fetch not only *areca* but also coconuts from the high palms on which they grow. The woman may help by collecting coconuts once they have dropped to the ground, and by carrying them home. Very often, however, the coconuts are carried by men, who tie two nuts to a stalk, thus creating a huge effigy of a phallus. The feeble empirical basis of this opposition only serves to emphasise that we are here being taught an ideology which requires the opposition.

The hero's second opposition centres on the culinary use made of the nuts. *Areca*, in opposition to coconut, has no place in the kitchen. The fact that coconut is also often eaten raw would weaken the opposition, but this is

619
423 a Land Titles Commissioner today has the
578 difficult task of adjudicating the rival claims
692 of two or more groups to the same areas of
657 forest land; each group can, moreover, produce men who can point out the trees marked by their ancestors and each group is convinced that they alone are in the right and the others merely conniving liars, who will use any methods to steal the land. The intensity of feeling which people generate over land became evident one day when I attended a meeting called by the Land Titles Commissioner to discuss rights to a small area between the Yega and a neighbouring parish. As my Yega friends and I left at the conclusion of the meeting we came on a group of Yega men in the bush fifty yards from the meeting site; they had prepared a supply of sharpened 8 foot poles 'just in case', they said, 'the others started a fight over the land!' Doubtless the other side was similarly prepared.

614 The Yega parish is composed of eight named,
613 exogamous, localised clans most of which are
[619] divided into sub-clans and lineages; descent is
591 patrilineal. On marriage, a girl leaves her
178 father's house and goes to live in the house provided by her husband; in past times the couple invariably went to live in the same village as the husband's father, but nowadays the rules have been greatly relaxed. Each clan
614 has a different totemic emblem which serves
784 as a kind of trademark. If the totem is an animal or edible plant it may not be eaten for food.

614 An abbreviated table illustrating the Yega
613 social structure is given in Table 1.
[P·6-B]

21: Belshaw E-5 (1951) 1951 OJ23 Orokaiva OJ23
Mount Lamington

823 for advice. The tragedy is that subsequent events were unpredictable. When
[731] the blast came it was so swift that there could only have been two or three minutes' warning, and the phenomenon was so far beyond experience or imagination that the people were too numbed to panic. Good order was maintained and the refugees successfully assembled in camps in a remarkably short while. Within two days camps were operating and supplied by air.

823 As the people settled and began to take stock of events, they began to seek for
731 explanations. An aeroplane had been flying close to the mountain at the time of the blast, escaping in the nick of time. One rumour had it that this aeroplane had
[784] dropped a bomb. Most explanations were, however, religious in nature. Some people said that this was God's visitation because they had disobeyed the Bishop's instructions to build new churches. Others said that God had punished them because they had not helped the Allies sufficiently during the war and because some of them had betrayed missionaries to the Japanese. By April most of these specific rumours
[783] had been countered. There remained, nevertheless, an almost universal belief that God had punished the people for their sins, and these sins were enumerated in general terms, such as lack of co-operation in Mission and Government plans for development. This sense of guilt is a most important factor in resettlement attitudes.

731 Another factor affecting resettlement attitudes was the speed, scale and nature of the relief measures. The war-time miracle—the rapid mobilization of resources—was repeated by the European, not for purposes of destruction but for the help of the Papuan people themselves. Once again the people asked themselves how the European was able to do this; and they were grateful that their need had been met.

Relief was not only provided in the form of rations and building sites where the people erected humpies for temporary shelter. Medical services in the camps were directed not so much towards the healing of the wounded, for few of these had survived, so much as towards the maintenance and improvement of general health. The Higaturu Hospital was completely destroyed, but excellent field dispensaries were set up at Oro Bay, Popondetta and Ilimo. At Ilimo there was also a baby welfare clinic, staffed by two European nurses and Papuan assistants. In a few weeks the Ilimo dispensary and clinic had established itself as a popular institution, serving the needs of surrounding villages as well as of the camp. The large numbers treated bore ample testimony to the scale of medical need in the district and the regularity of out-patient attendance was notable.

[673] The Government maintained a technical training school at Higaturu, and the Anglican Mission had an advanced school at Sangara. Both of these were destroyed with almost complete loss of staff and pupils, many of whom were almost ready for graduation. Immediate relief measures could do little to replace this critical loss. But the Mission, with Government assistance, recommenced village-level schools in the camps. At Ilimo particularly the Government started adult education classes, partly to provide something useful for the people in their leisure hours, but mainly

(or in the case of Irihambo, the Bishop) had decreed them. Had these people been Westerners rather than Orokaiva, they might have asked themselves the question whether the decision of the government to prohibit the Kongohambo people, for instance, to go and live further East in their old villages was a reasonable one. However, there is nothing self-evident in the asking of such a question. Criticism of an administrative decision is, i.e., a calculation of probabilities, fiduciary responsibilities and expediencies. For the Orokaiva, the problem was not whether the government decision was a "necessary" one, but rather: what was the most advantageous action they could themselves take in the circumstances. The advantages of going back to their old village sites were obvious. But these were clearly outweighed by two grave disadvantages: first, the probability of punishment by Australian authorities and secondly, the chance (to which I shall refer in detail later) that the whole eruption might have been a punishment by the Christian God for their earlier disobedience to government and Church demands, and that further disobedience might elicit a further eruption. It seemed foolhardy indeed to challenge both the government and the mountain at the same time. In this sense, we may confidently say that the Orokaiva felt the necessity of relocation.

657 three sides of it. (Administration) attempts to introduce such
361 villages in the Higaturu sub-district had largely failed and the standard of housing was much lower. Further, the people of this area tended to live in small clan-hamlets and resisted propaganda [731] for them to come together into larger village groups. After the eruption, however, the general desire for new things, the sense of [784] guilt at having resisted such innovations before, and a feeling of insecurity combined to make most of the people reconsider their earlier decisions. Although the move was not quite universal, by far the greater proportion of people decided to rebuild their homes in large village units situated close to existing or proposed jeep roads, and on administrative advice decided to follow the Kokoda village plan with substantially improved housing" (1951: 245).

At the time of Belshaw's research the only resettled areas were those West of the Waseta-Sairope line, and the villages Belshaw visited appear to have been in the Sairope area. As it turned out, the Kokoda village plan was in fact adopted in a great many villages in the Higaturu sub-district, though by no means as an immediate result of any decisions that may have been taken at Ilimo. In the Sivepe area, it seems clear that the people's first plan was to return to Pamba and only when Pamba became uncomfortable, partly through quarrels, partly through damage done by the eruption and partly through administration pressure, did they decide to build a new village in the new style. Within a radius of three miles from Sivepe, there are still a considerable number of old-style villages even today: Hamburata, Garombi, Torogota, to mention only three larger ones. Others, such as Duve and Binduta, were beginning to adopt the new style only around the time of my visit in 1966. In 1951, only those villages in which the government took a strong direct interest, such as Awala, Kongohambo, and the villages visited by Belshaw (but I could not enumerate them all) adopted the Kokoda style.

There is also a minor incompleteness in Belshaw's data when he refers to the neatly clipped grass and the rows of houses as being innovations due to the Kokoda influence. The neatly clipped grass was in evidence in 1906 and the regular rows of houses were reported by F. E. Williams (1930: 68). This was, admittedly, reported as late as the 1920's but the layout is consistent with the less explicit descriptions of Orokaiva villages given by Walker (1901) and by Monckton in his descriptions of his battles with the Dobudura and Sangara. The novelty of the Kokoda plan lies rather in the wide central field, the house design and use of materials, and the sanitation.

Undoubtedly, credit for the introduction of the plan must be given to the Ilimo experience but the spreading of the plan over the majority of Orokaiva villages must rather be ascribed to the growing influence of the Local Government Council in the 1960's.

731 retrospective look at the pre-eruption way of life."

Though most of the contemporary evidence tallies with the accounts of Belshaw and Keesing, I should refer to two documents both [789] dating from 1951 which add some subtleties. The first is a short manuscript by Fred Kleekham, agricultural officer, Popondetta, in which he says that "the Lamington eruption which obliterated the government station at Higaturu was regarded by many as payback for the hangings" (of Orokaiva responsible for the murder of missionaries). I tried unsuccessfully to find Orokaiva who still hold this belief. Mr. Kaad had not heard of it and suggested that as Kleekham was mostly working in the coastal region of the Northern District, he may have heard this interpretation of the eruption in that region. In any case, the explanation is worth noting because, once a disaster has been attributed to the anger of a supernatural agency, the causes of that anger are open to many plausible surmises.

797 Father Albert McLaren, while at Ilimo, composed two songs one 533 of which is still widely sung among the Orokaiva and even elsewhere, as it is included in a songbook distributed to primary schools in the Territory of Papua.

1

We were at Sangara
gathered together
With all our brothers
Living together

Chorus: Have mercy on them
Lord, we live in your hand

The mountain was made by Thee
It was not seen by us before;
Lord, when it appeared
We were wounded.

Chorus

O Heavenly Father,
Look on Thy servants
Who are in Paradise
In Thy Glory.

Chorus

When the mountain was shaken
They were watching
With their children
And were buried together

Chorus

797
533

2

In the land of Sangara
Are the bodies of our brothers
As though they were sleeping
But we shall see them again in the end

Our brothers on earth
Had many temptations
They went up to Heaven
In Thy Glory

The evening was bright
On the hills of Ilimo
But our thoughts
Are always with our brothers

731 Father Albert described to me his own experiences with the
784 eruption. He lost his own brother who was with the mission, but he was saved because he had been sent to Isivita for the service on the day of the eruption. He was able to escape by running down from Isivita. When he came close to the village of Simbeki, the darkness closed in. When the light returned, the clouds were red with flame or fire. When people saw this, he said, they thought the end of the world had come and this cloud was the fire of the Last Judgment that had come to burn them. Nobody knew anything about Higaturu being a volcano; or even of the existence of any volcano. They noticed the trees that were blown up, the branches broken down, the little hills of ash covering the valleys and people thought: this is the end of the world.

Father Albert said the Orokaiva did not use to have an idea of the end of the world; it was taught by Christianity. After the disaster, the people discussed it a great deal; through the disaster, God had shown the people just what was meant by the idea of the end of the world. I asked Father Albert whether he regarded the disaster as God's punishment for sins the people had committed, but Father Albert dismissed this idea: he did not think God would punish the innocent along with the guilty. This conversation took place many years after the disaster and can therefore hardly serve to refute the notion that in 1951, the eruption was regarded as divine punishment.

(777) Several government officials charged that the Anglican Bishop actually encouraged people to think that the eruption was a visitation of the wroth of God, as they had not followed the laws of the Church of England. They even add a variety of anecdotes, in which the Bishop threatened that if some demand of his (different in each anecdote) was not met, he would make the mountain erupt again. After meeting Bishop Hand personally, I must confess I am rather sceptical about these stories. The Bishop felt that some Orokaiva believed the eruption was a divine punishment. He stated to me that in his own sermons he

731 did not encourage this belief but spoke of the eruption as a natural
784 disaster. Certainly this is how Orokaiva often speak of it today,
[777] especially when they wish to give the impression of being modern and educated. Papuans close to the Mission invariably speak of it as a natural disaster.

A group of elderly people in Sivepe, however, produced a quite different theory when I interviewed them in 1966. They explained the eruption by the anger of the god Sumbiripa. I was told that this explanation was the generally accepted one at the time of the disaster. At Hohorita, I was likewise told that the people, at the time of the eruption, thought of the anger of Sumbiripa, though later they learned it had been a natural disaster. My Sivepe informants, however, added
[787] a refinement. Before Sumbiripa blew up, he gave two signs. To the Isivita people and those of the Sasembata district he made a sign of blue fire, which meant that these people would be saved. To the Sangara people, he gave a sign of red fire, which meant that they all died. The reason for his anger towards the Sangara people was that they used to throw hand bombs and shoot guns on the mountain. This theory has the advantage of explaining the facts more closely than the theory of the anger of the Christian God; it is easier to believe that Sumbiripa discriminated between the two tribes than that the Christian God should do so.

731 Before attempting to draw these rather various interpretations
152 together under a common theme, I shall refer briefly to F. E. Williams' extremely cogent discussion on the Orokaiva's general attitude to guilt, for which I myself collected much additional documentation. When an Orokaiva is wronged he displays a state of mind called *sisire*.
[762] A person who is *sisire* withdraws, refuses food, destroys his own property, may even commit suicide. By displaying his sorrow, he hopes to shame the person who has wronged him. When a person is spoken to roughly, he will feel *sisire*, "ashamed." It is the normal reaction to being punished. The purpose is invariably to make the other party feel sorry for what he has done. There is something of that feeling in Father Albert's songs. The main mood is not so much contrition as the hope that the singer will make God feel sorry. This is not quite the same as what we understand by "guilt." All Belshaw's evidence suggests that the Orokaiva people after the eruption felt very *sisire*.

Certainly, the eruption would be followed by a resolve not to
731 make the harsh power that brought the eruption angry again. Whether
784 this power was primarily identified with God or with Sumbiripa is
177 extremely hard to tell; it is even harder to tell whether these powers were viewed as being entirely distinct. Father Albert's testimony strongly suggests that the eruption was treated as symbolic of divine wroth as it was presented in the Bible. I have argued earlier that the Orokaiva look upon the Europeans as a new kind of culture heroes. The new dispensation brought not only new wealth and new knowledge, but also new wroth: Monckton's conquest, the world war, the eruption. It does not seem far-fetched to assume that the disaster was taken as

731 a warning not to openly disobey the new culture heroes, to deal with
177 them gently and cunningly and avoid making them angry. Thus the
eruption led to greater circumspection if not contrition. It also led
[784] to a sense of deeper involvement with the new age. The immediate
consequence was a fashion of modern village building in 1951, as both Belshaw and Kaad have reported. After this rather brief demonstration of respect to the deity, life reverted to its previous style for some years, after which there was a further period of innovation, more soundly based on the development of the Sasembata school, the local government council, the increase of economic opportunities, both in the towns and in cash cropping, and finally on nation-wide political development. The Orokaiva of today definitely sees himself as entering upon a new age, and he views this with optimism and some excitement. The eruption undoubtedly was perceived as a potent sign of the coming of this new age and the danger of resisting it. For this reason, it might theoretically be expected that new ideas would be accepted more eagerly in the resettlement areas than in the less affected areas such as Inonda.

177 Unfortunately, I find it hard to evaluate the Inonda data. The
554 Christian, cash-cropping families were as concerned to view themselves as living in a new age as were the people of Sivepe. The views of the other families were hard to obtain. Crocombe and Hogbin pointed out correctly that these families explain their non-participation in the coffee scheme by difficulties in their land title. The two authors also characterised the Pagan families as being of "lower status", pointing out that the "higher status" families are (also in neighbouring villages) the most likely to plant cash crops or likely to plant most, (1963: 85) for reasons of prestige. During my own stay, the Pagan families set themselves against participation in the women's club, as they felt it violated traditional custom. I had the impression that there was a status conflict between the factions, as participation in the church, the women's club or any other European activity would have put the resistant faction in a clear position of inferiority, and increased the power of the leader of the other faction who ran all these activities.

Section 11: Acculturation

177 The contacts and the ideological changes sketched in the previous sections have not led to a basic transformation of the culture. Williams' classical account of the Orokaiva, based on fieldwork conducted in 1923, still corresponds in fundamentals to what can be seen today. In the present section, I shall draw attention to some aspects of the culture that have changed since the eruption, but it should be stressed that, in field observation, they are seen as embedded in a largely traditional culture, with a social organization, economy,

CHAPTER VII: Mission Welfare Efforts

Section 1: Mission and Community

797 The mission at Sasembata formed a kind of community of its own.
361 From the ground plan of the mission station (Map XI) it will be seen that it differs somewhat from a village layout. In order to grasp its essentially Orokaiva nature, I shall have to compare the station with others I saw: at Hohorita, at Waseta, Isivita, etc. The Church and cross always occupy a central position. The houses at Hohorita and most other stations are in two facing rows, just as in an Orokaiva village, but at Sasembata the central field is so wide that this did not develop. The position of the church in the centre rather reminded me of the position in which Orokaiva build their feast houses; these are always in the central space facing away from Mount Lamington with a sizeable open area in front. The houses tend to be a little bigger than those in the villages. Since the craze for timber houses started, the mission lost no time in replacing its own teachers' houses with timber ones. Materials for these were always supplied by villagers.

875 It was traditional for villagers also to supply teachers with
425 land for growing taro. At Sasembata, the mission found it hard to
797 get this land; it would be lent from year to year, but never, as the head teacher would have liked, on a permanent basis. The Papuan priest was rather put out over this and talked about leaving, for that reason. This difficulty over land was not, as the head teacher supposed, a sign of meanness, but rather of the continuing power struggle between people and mission.

797 This power struggle is best understood as a variant of the kind
of rivalry that exists between any two villages, except that the mission station was a village of a special kind. Between the time it was first founded (in 1945) and the eruption, the staff was entirely
[731] Papuan. The eruption led to no defection but to a strengthening of the bonds between church and people, partly because of the Orokaiva
[784] interpretation of the disaster (which emphasized the powers of the Christian God) and partly because of the interpretation of mission operations in the affected areas. After 1951, the station and the school were much enlarged, and a European head teacher and a European nurse were assigned to Sasembata. These white missionaries would negotiate directly with the village men and obtain what help they needed--labour, materials, land--in exchange for their educational, medical and religious services. In 1955, a Papuan priest was attached to Sasembata. He gradually gathered round him a number of teachers from his own language area (the coastal Motu language) and

A [See Cat. 116, p. End Map 10--Analyst]

or even force Orokaiva settlement patterns from the traditional scattered hamlet system to village or even town living. Another tough question was how far Government should step in to supervise matters of economic and social welfare, including elementary schooling which hitherto policy had left almost wholly to the Anglican Mission. The majority of the mountain Orokaiva are now adherents of this Mission, the only body operating in the area. Questions relating to land tenure, social group realignment, leadership, law and order, and other matters involving local custom had also to be faced, especially in the course of the first experiments in resettlement.[4]

Officials and Mission workers reported that the explanations of the "cause" of the disaster given to them by Orokaiva, were, in general, of a supernatural nature: "God" was punishing them for "sins" such as "not supporting Mission and Government plans for development," "not building new churches as requested by the Bishop," or "not helping the Allies enough during the war." However much these may have pleased the hearers, the fact seems to be that there were resulting strong feelings of insecurity and even of guilt in their retrospective look at the pre-eruption way of life.[5] Officials who know the Orokaiva considered that these feelings undoubtedly helped to foster the extraordinary degree of cooperation and orderliness in situations where large numbers of people were necessarily herded together and shifted around without benefit of the traditional niceties and proprieties.

This raises the whole problem of interpreting the overt events here summarized in terms of their cultural and individual contexts. In discussing theory relating to the dynamics of change and resistance to change, the writer, along with others, has referred elsewhere to the general tendency for peoples to be pre-conditioned by the characteristic sets of their culture and personality norms, to be differentially "adaptable" or responsive to change in the face of new experiences.[6] The impression gained in this case is that subject to inevitable factors of shock and disorganization, the Orokaiva were culturally predisposed to respond to the traumatic experience here described with something approaching maximum adaptability.

The mountain Orokaiva are shifting cultivators, and supplement their staple food, taro, with sweet potato, yam, banana and sugar cane. Flesh from domestic pigs, chickens, dogs, and wild game is what Williams calls "a dainty rather than a diet." "Fresh ground," says this ethnographer, "is continually cleared for new plantings" in the typical pattern

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4. These matters are discussed particularly by C. S. Belshaw, an anthropologist working in Papua under the auspices of the Australian National University Research School of Pacific Studies, as a result of a visit to the area in April, 1951; see his "Social Consequences of the Mount Lamington Eruption," *Oceania*, 21, 4, pp. 241-252 (1951). This article was not seen until after the first draft of this paper was completed, and as the approach is considerably different the two papers are complementary rather than unduly overlapping.

5. Belshaw, *op. cit.*, p. 242, stresses this "guilt" factor.

6. F. J. Keesing, "Some Notes on Acculturation Study," Sixth Pacific Science Congress, *Proceedings*, IV, pp. 59-63 (Berkeley, 1940); "Cultural Dynamics and Administration," Seventh Pacific Science Congress, *Proceedings*, 14 pp., mimeographed (New Zealand, 1949).

his wife; the two were separated and found themselves on different crags. Sumbiripa became the first man to die, the master of the mountain within which he has since dwelt together with all Orokaiva who died subsequently.[12]

The myth explained the shape of the mountain as it was before the eruption. The crags are not there today because they were blown apart by the eruption. The myth also explained the rumbling of the mountain and the smoke that issued from it long before the eruption of 1951. Such phenomena were regarded as signs sent by Sumbiripa. Ritual prohibitions limited access to the area close to the crater as there was a belief that Sumbiripa, if disturbed, would be angry. There was also a great fear of the dead who were supposedly dwelling in the mountain. It is believed that the dead wander about the countryside, where they may attack humans. Sumbiripa is dangerous, even if he does not erupt, because he can send out his ghosts to cause misfortune among men. The myth about Sumbiripa Kanekari hints at the possibility of an earlier eruption by the account it gives of the origin of the crags existing before 1951.

The sociological importance of the eruption lies largely in the explanations of the event developed afterward by the survivors. These explanations are related to the situation of Orokaiva society in 1951. Here we must distinguish between the situation as it appeared to the Orokaiva individual or to small refugee groups and the collective situation of the Orokaiva tribes as they collectively perceived it, in terms of the basic forces shaping their social life at that period. We may follow Burridge (1960) in identifying these basic forces with the colonial government, planters and traders, the mission, and relations within and between tribal groups.

Immediately after the eruption, the situation for individuals and small groups was dominated by fear of the mountain, grief for dead relatives, and anguish at separation from the land. The situation was influenced, moreover, by abrupt changes in social organization. The Sangara fugitives mostly fled alone or in very small groups, leaving behind their numerous dead; the Sasembata fugitives mostly fled in village groups led by their village constables. While the disaster made the Sangara leaderless, in Sasembata it merely reduced dependence on traditional leaders at the gain of the village constables whose responsibility was greatly increased. Village constables were members of village communities ap-

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pointed by the administration to enforce regulations concerning law and order, works and amenities. They were not necessarily 'big men', customary feast-givers or, military commanders.[13] At Ilimo they at once became the leaders of all operations (food distribution, house building, visits to the home village), as these involved dealings with the Europeans in control of the rescue and supplies.

These organizational changes, individual fears, grief, anguish, and the increased dependence on village constables and white authorities were certainly reflected in the explanations given of the eruptions. But these explanations took account also of far broader cultural issues, in fact of the total postcontact experience common to the population of the Northern District.

The Orokaiva explanations of the disaster to be considered here certainly cannot be understood except in the context of the total Orokaiva cognitive system. Any Orokaiva explanation places the eruption within a logically consistent framework of meaning, but it is only one of several possible frameworks that might, successively or even simultaneously, be constructed out of the Orokaiva cognitive system. I propose, in the present section, to construct a model of the various systems of connotation and the relations between them. Systems of denotation are briefly referred to here but explored in more detail in the following section.

One obvious line of explanation of the eruption was to ascribe it to the anger of Sumbiripa. Many Orokaiva actually explained the disaster in this way at the time it happened, as may be seen from the evidence of Tomlin (1951), Benson (1955a, 1955b), and Schwimmer (1969:69ff.). The anger of Sumbiripa, as supposedly expressed in the eruption of Mount Lamington, was explained by Orokaiva by various disrespectful acts against the mountain. Grenades had been thrown near the crater during the war. Afterward, the Orokaiva began to acquire guns for hunting on the mountain. Such were the acts quoted to me in Hohorita and Sivepe as arousing Sumbiripa's anger. The eruption was regarded by informants as an unprecedented event. The question arose in the Orokaiva mind why such an event should occur just then, when it had never happened before. The anger of Sumbiripa had always been feared, but no sinister meaning had been attached to the rumblings and, smoke signals, and, moreover, revenge had always been mediated through 'ghosts'. The new form of punishment could be explained

only with reference to a quite novel form of infringement of the taboo—a far more offensive infringement than had ever happened before. Just what made grenades and guns so offensive?

This question may be answered on several levels. The first of these is a purely ritual level. Of all the novel activities in which the Orokaiva engaged near the mountain, the ones that were singled out as significant stood out by making a sharp, loud, and dangerous noise. Now there are many ritual contexts where the Orokaiva use silence as a sign of respect and noise as a sign of disrespect. Hence the Orokaiva were ritually consistent when they told me it was the noise of the hunters' guns that angered Sumbiripa. But hunting rifles have a further symbolic significance that should be taken into account. I was told that game on the mountain was plentiful until the guns were introduced but that today hardly any game is left because the guns killed it all. In this instance the Orokaiva were giving a very reasonable explanation of a drop in game population which was probably real enough. In fact everybody uses guns today or wants to use them, as they are effective for hunting. But they are also sinister—that is, their effectiveness is known to be too great to allow the game population to survive.

The young men who took up the use of hunting rifles between the end of World War II and the time of the eruption were bold innovators and at the same time they were considered slightly wicked in abandoning traditional hunting methods. This is implied by informants who account for the eruption by the anger of Sumbiripa. They are thinking of the breakdown of the old order by the adoption of European innovations, Sumbiripa representing the potency of the old order. They argue that if only the young men had not started to use hunting rifles, the disaster would not have happened. The young men would never have dared to make such a din close to the crater if their respect for the spirits had not been undermined by newfangled doctrines.

The explanation of the disaster considered here resembles all other recorded explanations in one fundamental respect: it is not merely the application of a traditional rule to a new event but it generates a new rule, justifies the rule in the light of empirical evidence, and can be comprehended only in the framework of an ideology which in turn was generated by contemporary events. The starting point of all the explanations is the activity of white officials, missionaries, and traders among the Orokaiva and the

innovations they have brought. Those who blame the eruption on the anger of Sumbiripa regard these innovations as potentially disastrous. They argue that the eruption has proved their point; it has fortified them in their ideology. Furthermore, they have established the rule that people should not shoot on the mountain. Before the eruption this was not, to my knowledge, clearly formulated as a ritual prohibition. Today it is clearly stated though generally disregarded for reasons we shall soon learn. In justification of the rule, it should be noted that it is supported by some very cogent evidence from Sivepe villagers. It is a fact that while the eruption killed nearly all the Sangara it killed very few people of Isivita and the Sasembata districts, even though they live equally close to the crater. It is also a fact that while the Sangara had many hunting rifles in the late 1940s, the Isivita and the Sasembata districts then had few or none. I was told that Sumbiripa gave two signs just before the eruption. To the Isivita people and those of Sasembata district he made a sign of blue fire, which meant they would be saved. To the Sangara people he gave a sign of red fire, which meant they would all die.

We note that this way of explaining the disaster is concerned with a precontact social macrosystem comprising two allied groups, the Sasembata and Isivita, and their traditional enemies, the Sangara. It is not concerned with the contemporary macrosystem which is the system of relations holding between Papuans, the government, and the mission. Neither the government nor the mission enters into the explanation. Furthermore, the explanation emphasizes the tribal boundary between the Sangara people and those designated as the Waseta tribe by Williams (1940).[14] It is, in fact, the opposition between Sangara and Waseta that is stressed by this explanation.

It is precisely this opposition that makes clear the strategic and manipulative nature of the argument. Waseta are using the occasion of the eruption to score a point against their old rivals and enemies the Sangara, who deserved to be punished as retribution for earlier acts of war. The explanation ignores the fact that ninety-two Waseta also were killed in the disaster.

At this point we recognize the explanation as part of a connotative system. Any reasonable explanation of the disaster would account for all the deaths. The division of the dead into tribal or ethnic groups is logically insignificant. In a connotative system,

eruption met their fate on the very same spot (Higaturu) where the executions took place some years earlier.

I include the Yega explanation in this study because it influenced the total regional communication system from which the Orokaiva derive their basic concepts. What is this regional system? It is certainly not a postcontact introduction, yet it has a very different significance now as compared to the last century.

Williams (1940, n.d.) shows that the external boundaries of the human race, as defined in Orokaiva myths, take in most of the population of the Northern District of Papua but do not extend beyond the Northern District. Internal boundaries drawn in the myths separate this population into a number of mutually hostile language groups, each specializing in the production or supply of certain distinctive products. It was an integral part of Orokaiva social thought to hold that permanent peace was impossible between the groups thus separated, although a truce was occasionally established and trade and intermarriage were regular occurrences. In this respect, the Cargo Cults of the early postcontact period (the Baigona Cult in 1912 and the Taro Cult in 1914) marked a radical innovation. The chief social message, especially of the Taro Cult, was that villages and tribes hitherto divided by strife should be united in brotherhood. The cult taught that the traditional tribal boundaries should be disregarded and all Papuans of the region were one people. This idea started in the coastal region but soon spread from there to Orokaiva territory (see Chinnery and Haddon 1917; Williams 1928).

At the time of the eruption, the coastal people were again involved in a millennial movement, the Christian Cooperative, which was spreading throughout the Orokaiva tribes. While tribal boundaries were a source of anxiety in all the evacuation camps (though the anxiety was more acute among Sangara relocated on the coast than among Orokaiva relocated at Ilimo), the possibility of a further development of the Christian Cooperative was still open, and this would have involved general acceptance of the Yega explanation of the disaster.

Comparing the Orokaiva and Yega explanations, we note that the cause of the eruption in both cases is the anger of Sumbiripa, although the Yega explanation is not entirely explicit on this point. Furthermore, both explanations take a rather negative view of European power—one by ignoring it, the other by making it the ob-

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ject of the wrath of the mountain. There are, however, two interesting differences. The first is that in the Orokaiva explanation we find an opposition between two tribes (Waseta innocent; Sangara guilty). In the Yega explanation we find an opposition between ethnic groups (Papuans of the Northern District innocent; Europeans guilty). This classing together of the Papuans of an entire region is a departure from traditional tribalism. It reflects an ideology aimed at maximizing indigenous power by the establishment of an intertribal regional coalition.

The second difference lies in the role of Sumbiripa (or whoever the angry deity was) in the two explanations. In the Orokaiva version, the transgression was against the sacred domain of Sumbiripa and thus of a familiar traditional type. In the Yega version, the punishing God assumes a strangely political role in taking the side of the Papuans against their enemies, the whites. The crime of the whites admittedly took place near the mountain, though not in the sacred domain. Sumbiripa was never, in any other context, described as a general defender or avenger in support of "his" people. Indeed he seems to be playing a somewhat Jehovah-like role in this tale. We are here in the sphere of the Cargo Cults or millennial movements rather than in that of traditional Melanesian religion.

Meanwhile no mention is made of the 3,500 Sangara who died in the disaster. This would have weakened the argument, for any reference to the Sangara victims might have suggested that they too were worthy of punishment. Though the Yega probably do think so, it would not have been expedient to say so when an intertribal alliance was contemplated. Here we are obviously closer to ideological rhetoric than to philosophical speculation.

The third explanation of the disaster is the one that has attracted the most attention by previous writers. Belshaw, who met Orokaiva survivors a few weeks after the eruption, records the following observations (1951:242):

> Some people said that this was God's visitation because they had disobeyed the Bishop's instructions to build new churches. Others said that God had punished them because they had not helped the Allies sufficiently during the war and because some of them betrayed missionaries to the Japanese. [Others again mentioned] lack of cooperation in Mission and Government plans for development. . . . This sense of guilt is a most important factor in resettlement attitudes.

Keesing (1952:18) agrees with this summary, adding that the eruption resulted in "strong feelings of insecurity and even of guilt in their retrospective look at the pre-eruption way of life."

A great deal of evidence supports Belshaw and Keesing in their suggestion that in 1951 the Orokaiva ascribed the eruption to the anger of the Christian God and thought they had brought this anger on themselves by various transgressions. Orokaiva informants reported that this view of the eruption was widely current at Ilimo evacuation camp. It is reflected in a song about the eruption which is still sung by Sivepe youth. This song declares the omnipotence of God and man's absolute dependence on him. It also attests to a wholly Christian eschatology: the abode of the dead is Heaven, where the living will later meet their brothers who died in the eruption. The song admits the guilt of the dead ('our brothers on earth had many temptations'), but the strongest emphasis is on the suffering of the living through the loss of their 'brothers'. Unlike Job, the singer is far too polite to contend with God and criticize his actions. He does not openly and clearly identify God as the author of his sufferings, but God's responsibility is subtly implied.

The rationale of this explanation is not obvious. Quite clearly those who believe that God and not Sumbiripa was responsible for the disaster have some belief in Christianity. In response to contact with the white man they have developed an ideology supporting the work of the missions. But how do they explain the eruption? It seems very clear that in 1951 many explained it as retribution for their lack of respect for the Christian God. But Orokaiva Christians interviewed in 1966 and 1967 rejected this explanation as resting on a misunderstanding of the nature of God. Father Albert, who composed the song referred to above, was one of those questioned. He said that many of those who died in the eruption were little children. He did not think God would punish the innocent along with the guilty. On the other hand, he did ascribe a divine purpose to the eruption. Father Albert said the Orokaiva used to have no idea of the end of the world; this notion was taught by Christianity. After the disaster the people discussed it a great deal: when they saw the sky darken and people dying from the blast, they thought the end of the world had come. God had shown them what the end would be like. In other words,

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Father Albert thought that God sent the eruption as a sign. Orokaiva Christians would generally agree with this view, though none of those interviewed formulated it so clearly.

From the viewpoint of this study, the question whether the Orokaiva considered the eruption as a punishment or as a sign is perhaps not a crucial one. In either case, whoever believes that God was responsible must also believe that a dire fate awaits anyone who fails in his obligations to the mission.

Comparing the three explanations surveyed so far, we note that the Christian explanation, like the Yega one and unlike the Waseta version, attached no significance to tribal divisions. God (like the Sumbiripa of the Yega) makes no distinction between tribes, but he does distinguish between the disobedient Papuans of the region and the administrators and missionaries these Papuans failed to obey. The former are guilty but not the latter.

Christian and Yega theories are opposed as to who is the guilty party. Indeed, the Christian explanation omits all reference to European deaths on the mountain, just as the Yega version suppressed the fact of the Sangara victims. The reason is no doubt the same: rhetoric demands that one should not in the same breath advocate a coalition with the white power bearers and admit that the latter suffered many deaths in circumstances implying their guilt.

With regard to connotations, all three systems differentiate between either tribes or ethnic groups that fell victim to the disaster, even though such differentiation is insignificant for explanatory purposes. If we use a minus sign to designate the social groups classed as guilty and a plus sign for the groups classed as innocent (though in fact the latter, too, suffered serious losses), we find:

	Victims		
Explanation	Waseta	Sangara	European
Waseta	+	−	omitted
Yega	+	+	−
Christian	−	−	+

I shall briefly mention a fourth system, though the explanation it contained was put forward by a small minority and was but feebly believed. Several Orokaiva close to the mission maintain nowadays that the eruption was due solely to geophysical causes. The mission authorites put forward this explanation to counter criti-

felt toward the exchange partner, fear of the trouble he might cause, instrumental benefits he has to offer, the importance of the partner in the total exchange network, and so on.

Anger, in this Orokaiva philosophy, is a normal attitude toward a partner with whom one stands, for the time being, in a relation of negative reciprocity. An exchange of injuries takes place until peace is made by the offer of an appropriate gift and feast. The anger of Sumbiripa does not completely fall into this pattern because here the exchange relationship is somewhat limited in scope. Sumbiripa's gift to man is the safe confinement of the dead, whereas man's gift is merely the avoidance of any disturbance of Sumbiripa's mountain. Man mediates the relationship by sending his dead to Sumbiripa; Sumbiripa mediates it by emitting his usually innocuous rumbling. Before 1951, Sumbiripa was not known by Orokaiva to have ever erupted. Hunting on the mountain and similar infractions were believed to have broken the exchange relationship and thus aroused Sumbiripa to a just reprisal.

Sumbiripa's anger was righteous not only because he was a god. In the framework of Orokaiva thought, serious anger is normally regarded as righteous, at least among persons standing in a regular exchange relationship. If anger expresses itself in verbal abuse or physical violence it is not serious, but it becomes so if misfortunes occur because of sorcery imputed to the person who is wronged. The successful magical expression of anger proves that anger to be well founded. A man may of course decide to use countermagic, and if that works the anger is no longer serious. If countermagic does not work, a man must be ready to acknowledge his fault and make reparations.

In such a dispute it is of course relevant which side has broken a rule, but the rules are most often debatable. In the end nothing is considered worse than to have made another person seriously angry. Prudence demands that seriously angry persons should be mollified, unless their kinship and physical distance is such that they can be defined as enemies. But even between enemies, a time comes when anger is shown by magical and other misfortunes to become inexpedient.

Self-accusation and self-inflicted injury are a regular part of this system. In order to make peace a person must define himself as the transgressor (Schwimmer 1970a, n.d.), as the Papuans did in the 'anger of God' explanation. Self-injury is a regular strategic

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weapon, since the person who cuts down his own tree to injure himself shows anger about a hostile act perpetrated by some unnamed person. He thus makes a claim for community sympathy and possible restitution (Williams 1940). Self-accusation is a form of self-injury and therefore at once places an obligation on the *sufferer* of the supposed original injury. In this sense an acknowledgment of guilt by Orokaiva would place some obligation on Sumbiripa or God to forgive them. Thus we can never ignore the transactional element in what is manifestly a sincere state of contrition.

It is far more complicated to explain the anger of the Christian God, and people's belief in it, than to explain the anger of Sumbiripa. At the time of the eruption, few Orokaiva had been baptized, whereas it was precisely in Sangara territory that the mission was well established and had many adherents. Most of the persons who thought they had been punished by God were actually still pagan, which strictly should have put them out of reach of his wrath. We need to reconstruct as best we can what kind of exchange relationship was deemed to exist in 1951.

We can appraise this only if we consider briefly the total system of relationships of the Orokaiva within the colonial macrosystem, namely the social unit comprising Orokaiva, mission, government, and traders. Theories about the punishment of God referred not only to Orokaiva neglect of the mission but also neglect of instructions and advice given by the government. The traders were never mentioned.

One common characteristic of government and mission is that both institutions believe they are the Papuans' benefactors and say so on many occasions. In particular, it is on these supposed benefits that they base any moral claims they make on the Orokaiva. When the eruption occurred it was therefore reasonable, from the Orokaiva viewpoint, to conclude that their slowness in satisfying the claims of government and mission had aroused in them great anger and that God, who manifestly was looking after the white authorities, acted as agent of the punishment.

In exchange relations it is a fixed policy to satisfy the claims of important partners first and be much slower about the others. The fact that the whites, in spite of their immense wealth, had a fairly low partnership ranking is not difficult to explain. If we glance at the kind of interaction typical of the years 1900 to 1950, we find

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whose contact with this aspectt of European culture heretofore had been rather slight. The impactt of these intensive programs should not be overestimated, howeveir. For people whose world had been shattered by disaster and rellocation, adult education was, according to administrators involved in the program, hardly a major concern. Belshaw (1951) expressed the view that the villagers would agree to almost any reform in their villages, as long as they would be allowed to leave Ilimo quickly and return to their land.

Nonetheless, the terms of the exchange relationship between administration and mission om the one hand and the Orokaiva on the other had become a great deal clearer and more profound. The Australians had made gifts and had stated what they wanted from the Orokaiva in detailed, explicit terms. Furthermore, this had been done under the shadow of a calamity which was interpreted by the mission as a sign of God, if not God's punishment, indicating the dangers of not satisfying the Orokaiva's new exchange partners.

The administration has leveled much criticism against the mission for promulgating the theory that the eruption was a visitation of the wrath of God. Numerous instances are quoted of ecclesiastical blackmail: the bishop allegedly threatened to blow up the mountain a second time unless he was obeyed. The bishop denies these allegations and claims to have discouraged the belief that the eruption was a divine punishment of the (largely unbaptized) Orokaiva. He said it was the Orokaiva themselves who had this idea of retribution.

To explain the Orokaiva idiea of the anger of God found in the preceding pages, I have brought together a somewhat haphazard collection of signs which make no sense if arranged in a synchronic pattern. They are a sequence of transactions which took place within the colonial macrosysttem and were selected on no other grounds than that they were commonly invoked by Orokaiva in discourse about the 'new age'. Soldiers on punitive expeditions, physical punishment at the plantations, the warm exchange relations with Allied troops, the local government councils viewed as a gift from the whites to the Papuans—all these are random selections from history and owe their place in the analysis of the metalanguage to the fact that the Orokaiva commonly used them to signify the opposition 'old order/new age'.

Earlier in this section, I expllained the idea of the 'anger of Sum-

biripa' in terms of a simple transactional sequence. The 'anger of God' can be similarly explained, though here the sequence is more complex. As a general device for constructing metalanguages, transactional sequences are of course wholly inadequate. I have, however, indicated that in the Orokaiva cognitive system God is classified as an exchange partner (though more powerful than all other possible partners).

The eruption thus becomes one of a sequence of signs which express the development of the exchange partnership with God. Similarly, in other explanatory systems, the eruption becomes part of a sequence of exchanges with Sumbiripa. It follows from this argument that the eruption changed the relationship with God or Sumbiripa, in the sense that a sign of such magnitude provoked a response. While the sign may have existed as such only in the minds of the Orokaiva, the response was on the level of real social, economic, political, and religious behavior. The general form of Orokaiva metalanguages, as exemplified in the case of the eruption, is sketched in figure 1.

EXPLANATIONS AND THE COGNITIVE SYSTEM

We have now surveyed the four explanations given of the eruption of Mount Lamington. In my discussion of the denotative systems, I concentrated on two of them: the anger of Sumbiripa and the anger of God. I did not specifically discuss the geophysical explanation because it was too summary for analysis, nor did I analyze the Yega explanation further because of the uncertainty about the agent of vengeance. We have seen that the four explanations were, in each case, not only a psychological response to calamity and a philosophical exercise but also expressed ideologies essentially unconnected with the eruption and that, in this respect, discourse about the eruption was actually rhetoric used to express the ideology.

The coexistence of four such ideologies in the same society poses obvious questions about their interrelations. Were they held by separate groups who did not communicate? Did they reflect divisions within the society? Furthermore, a formal problem arises: as these four explanatory systems all arise in one, fairly homogeneous society, are they in a sense cognate and do they display features of homology? On the basis of Orokaiva data, it may be possible to

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FIGURE 1 Example of Orokaiva Explanation of Anger of God

Disappointment
Default
Murder of missionaries. No subsequent improvement in participation.
Eruption.
Anger
Admission of guilt
Increased cooperation.
Gift of baptism and communion.
Pastoral Care
Obedience
Material help and participation in church.

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